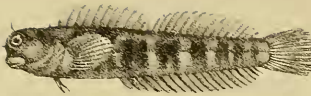


1



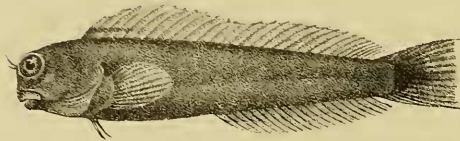
2



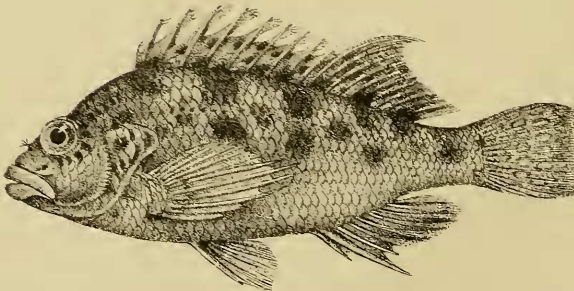
3



4



5



6

J. Green del. lith. et imp.

1. *BLENNIUS ATROCINCTUS*. 2. *B. NATIVITATIS*.

3. *SALARIAS CAUDOFASCIATUS*. 4. *S. NATALIS*. 5. *S. MELANOSOMA*.

6. *CIRRHITES MURRAYI*.

3. A Collection of Fishes made by Dr. C. W. Andrews,
F.R.S., at Christmas Island. By C. TATE REGAN,
M.A., F.Z.S.

[Received March 4, 1909.]

(Plates LXV. & LXVI.*)

The fishes obtained by Dr. Andrews at Christmas Island are of considerable interest, as they include examples of seven species which appear to be new to science.

1. *MURENA NEBULOSA* Ahl.
2. *PLESIOPS MELAS* Bleek.
3. *SPHLERODON HETERODON* Bleek.
4. *PARUPENEUS ANDREWSII*, sp. n. (Plate LXV.)

Depth of body a little more than the length of head, which is $3\frac{1}{4}$ in the length of the fish. Interorbital region very convex, its width $3\frac{1}{4}$ in the length of head; diameter of eye 6 in the length of head; lips thick; barbels a little more than $\frac{1}{2}$ the length of head; 25 gill-rakers on the lower part of the anterior arch. 31 scales in a longitudinal series; tubules of lateral line much branched. Dorsal VIII, 9; second spine slender, flexible, not stronger than the others; third longest, $\frac{2}{3}$ the length of head; last soft ray moderately produced. Anal I, 7, the spine very small. Pelvics a little longer than the pectorals, $\frac{2}{3}$ the length of head. Caudal peduncle nearly twice as long as deep. Reddish, with two broad blackish vertical bands below the bases of the spinous and soft dorsal fins respectively; snout dark bluish; spinous dorsal blackish; soft dorsal blackish at the base and with somewhat oblique stripes superiorly; anal with similar stripes.

A single specimen, 270 mm. in total length. From allied species with a somewhat similar coloration *P. andrewsii* is distinguished by having the second dorsal spine slender and flexible. Dr. Pellegrin has kindly examined the specimens in the Paris Museum described by Cuvier and Valenciennes as *P. bifasciatus* and *P. trifasciatus*, all of which have a strong, pungent, second dorsal spine †, as have the specimens in the British Museum referred to those species. *P. bifasciatus*, in most respects the nearest to *P. andrewsii*, differs also in that the last ray of the second dorsal is the shortest instead of the longest (Bleek. & Pollen, Faun. Madagasc., Poiss. pl. xviii. fig. 2).

5. *CHELMO LONGIROSTRIS* Brouss.

* For explanation of the Plates see page 406.

† This was clearly seen in Lacepède's type of *P. bifasciatus*.

6. *CIRRHITES MURRAYI*, sp. n. (Plate LXVI. fig. 6.)

Depth of body $2\frac{1}{2}$ to 3 in the length, length of head $3\frac{1}{4}$ to $3\frac{1}{2}$. Snout as long as or longer than eye, the diameter of which is $3\frac{1}{2}$ to 4 in the length of head and about twice the interorbital width. Maxillary extending to below anterior part or middle of eye; anterior nostril with a fringed tentacle; cheek with 4 series of scales. 44 to 46 scales in a longitudinal series. Dorsal X 12; fifth and sixth spines longest, $\frac{1}{2}$ the length of head; interspinous membranes deeply notched, produced into a penicillated lobe behind each spine; first soft ray the longest, about $\frac{3}{4}$ the length of head. Anal III 6; second spine strongest and longest, $\frac{2}{3}$ the length of head. Pectoral with six simple rays. Caudal subtruncate. Reddish, with about 6 blackish vertical bars, each of which is usually broken up into 3 or 4 oblong spots; blackish spots on head and on spinous dorsal fin.

Seven specimens, 64 to 78 mm. in total length; a number of smaller examples are not included in the description. The species is named after Sir John Murray, K.C.B., F.R.S.

I accept the family Cirrhitidae as defined and limited by Dr. Günther, with the addition of *Haplodactylus*. This very natural group is characterized externally by a number of features, amongst which may be mentioned the unbranched lower rays of the pectoral fins and the posterior position of the pelvic fins. Of osteological characters the most notable are the form of the cleithra, which have strong horizontal expansions anteriorly and meet in a long symphysis inferiorly, and the attachment of the well-developed epipleurals at or immediately above the insertion of the ribs. A subocular shelf is present in *Cirrhitès* and *Chilodactylus*, absent in *Chironemus*, *Latris*, and *Haplodactylus*. Parapophyses commence on the first vertebra in *Latris*, *Haplodactylus*, and *Chilodactylus*, on the third or fourth in *Chironemus*, and on the fifth or sixth in *Cirrhitès*.

7. *GLYPHIDODON SORDIDUS* Rüpp.

8. *PLATYGLOSSUS HYRTELII* Bleek.

9. *PTEROIS VOLITANS* Linn.

10. *CARACANTHUS UNIPINNA* Gray.

11. *GوبيUS ALBOPUNCTATUS* Cuv. & Val.

12. *TRIPTERYGIUM ATROGULARE* Günth.

13. *BLENNIUS NATIVITATIS*, sp. n. (Plate LXVI. fig. 2.)

Depth of body nearly equal to length of head, about 5 in the length of the fish. Snout vertical; maxillary extending to below posterior edge of eye; a pair of posterior canines in the lower

jaw; tentacles all simple, the nasal and nuchal pairs short, the ocular pair longer; no crest on the head. Dorsal XII 15; notch rather deep; last ray not connected with the caudal. Anal 18-20. Caudal rounded or subtruncate. Reddish, with about 8 darker cross-bars, sometimes appearing only as a series of oblong blotches along the middle of the sides; fins pale.

Several specimens, measuring up to 45 mm. in total length.

14. *BLENNIUS ATROCINCTUS*, sp. n. (Plate LXVI. fig. 1.)

Depth of body nearly equal to the length of head, about 5 in the length of the fish. Snout vertical; maxillary extending to below middle of eye; no canines; nasal and orbital tentacles bifid; no nuchal tentacles; no nuchal crest. Dorsal XIII 17; first three rays rather wide apart; notch rather deep; last ray not connected with the caudal. Anal 22. Caudal rounded or subtruncate. Reddish, with 6 blackish cross-bars continued on to the basal part of the dorsal fin; anal blackish.

A single specimen, 27 mm. in total length.

15. *SALARIAS HASSELTII* Bleek.

16. *SALARIAS CAUDOFASCIATUS*, sp. n. (Plate LXVI. fig. 3.)

Allied to *S. marmoratus* Benn. Depth of body a little less than the length of head, $\frac{1}{5}$ the length of the fish. Snout vertical; maxillary extending to below posterior edge of eye; a pair of posterior canines in the lower jaw; nasal and orbital tentacles fringed; a pair of short, simple nuchal tentacles; no crest. Dorsal XII 15; anterior portion low; second portion elevated, with the rays decreasing in length from the first; last ray not joined to the caudal. Anal 18. Caudal subtruncate. Reddish, with scattered pale spots and with 6 dark cross-bars, each of which is split into two; caudal with dark vertical bars; anal dusky.

A single specimen, 55 mm. in total length.

17. *SALARIAS NATALIS*, sp. n. (Plate LXVI. fig. 4.)

Allied to *S. unicolor* Rüpp. Depth of body equal to or less than the length of head, $5\frac{1}{4}$ to 6 in the length of the fish. Snout vertical; maxillary extending to below posterior edge of eye or beyond; a pair of posterior canines in the lower jaw; nasal tentacles simple or fringed; orbital tentacles rather long, fringed; no nuchal tentacles; an occipital crest. Dorsal XII-XIII 17-18; notch deep; last ray not joined to the caudal. Anal 20-22. Caudal subtruncate or rounded. Head and body with 14 purplish cross-bars arranged in pairs and usually split up to form 3 longitudinal series of spots; fins dusky, the dorsal with oblique stripes.

Eleven specimens, measuring up to 60 mm. in total length.

18. *SALARIAS MELANOSOMA*, sp. n. (Plate LXVI. fig. 5.)

Allied to *S. anomalus* Regan (Journ. Bombay Nat. Hist. Soc. xvi. 1905, p. 327, pl. ii. fig. 4), but with the nasal tentacles double or even triple, one or sometimes two shorter tentacles originating at the base of the longer one. Dorsal XII 17, the spines not produced, the longest not more than $\frac{1}{2}$ the depth of the body. Anal 20. Caudal truncate or slightly trilobed. Blackish or dark brownish; middle rays of caudal dusky.

Six specimens, measuring up to 60 mm. in total length.

The presence of posterior canines in the lower jaw led me to re-examine *S. anomalus* and I find they are present, but often hidden by a fleshy fold.

19. *BROTULA MULTIBARBATA* Schleg.20. *BALISTES RECTANGULUS* Bl. Schn.21. *DIODON HYSTRIX* Linn.

EXPLANATION OF THE PLATES.

PLATE LXV.

Parupeneus andrewsii.

PLATE LXVI.

- Fig. 1. *Blennius atrocinctus*.
 2. " *nativitatis*.
 3. *Salarias caudofasciatus*.
 4. " *natalis*.
 5. " *melanosoma*.
 6. *Cirrhites murrayi*.

4. On some New and Little-known *Hesperiidæ* from Tropical West Africa. By HAMILTON H. DRUCE, F.L.S., F.Z.S.

[Received March 16, 1909.]

(Plate LXVII.*)

Amongst a collection of Lepidoptera obtained in the Cameroons, I have been able to distinguish 74 species of *Hesperiidæ*, including those described in this paper. Professor Aurivillius has recorded 62 in his list of Butterflies from the Cameroons (Ent. Tidsk. 1896, pp. 279-291), and the following species are not referred to by him, 32 in all, making about 100.

Types of new species in Mus. Druce.

* For explanation of the Plate see p. 413.